

LINDIL C. FOWLER, JR., GENERAL COUNSEL COLIN K. LINEBERRY, DIRECTOR HEARINGS SECTION

# RAILROAD COMMISSION OF TEXAS

# OFFICE OF GENERAL COUNSEL

**RULE 37 CASE NO. 0273962 STATUS NO. 729386** District 09

APPLICATION OF XTO ENERGY, INC., FOR A RULE 37 EXCEPTION FOR THE ROSE A UNIT, WELL NO. 9H, NEWARK, EAST (BARNETT SHALE) FIELD, TARRANT COUNTY, TEXAS

**APPEARANCES:** 

FOR APPLICANT:

**APPLICANT:** 

**David Gross** Rick Johnston Penny Judge

XTO Energy, Inc.

FOR PROTESTANTS:

**PROTESTANTS:** 

Daniel St. Clair

Daniel St. Clair Gerald Bolonchuk

#### **PROPOSAL FOR DECISION**

#### PROCEDURAL HISTORY

DATE APPLICATION FILED: DATE OF NOTICE OF HEARING:

**DATE OF HEARING:** 

**HEARD BY:** 

December 13, 2011

December 21, 2011

January 11, 2012

James M. Doherty, Hearings Examiner Brian Fancher, Technical Examiner

January 24, 2012

February 16, 2012

DATE TRANSCRIPT RECEIVED:

DATE PFD CIRCULATED:

#### STATEMENT OF THE CASE

XTO Energy, Inc. ("XTO") seeks an amended drilling permit pursuant to the provisions of Statewide Rule 37 for the Rose A Unit, Well No. 9H, a proposed horizontal well in the Newark, East (Barnett Shale) Field, Tarrant County, Texas. An original drilling permit was issued for Well No. 3H on December 8, 2011. This original drilling permit is subject to no perforation zones ("NPZs")

around Tract Nos. 50 and 124, which are unleased tracts within the perimeter of the Rose A Unit. These two NPZs have combined length of 1,630 feet. The purpose of the present application is to obtain an amended drilling permit that eliminates the NPZs that encumber the original drilling permit for Well No. 9H.

Appendix 1 to this proposal for decision is a copy of a plat included in XTO Exhibit No. 11 that depicts the Rose A Unit and Well No. 9H as encumbered by the NPZs around Tract Nos. 50 and 124. Appendix 2 to this proposal for decision is a copy of the plat associated with the present Form W-1 application included in XTO Exhibit No. 12 that shows the Rose A Unit and Well No. 9H as it would be drilled by XTO if the present application is approved. The XTO application is opposed by Daniel St. Clair and Gerald Bolonchuk, the owners of the two unleased tracts within the perimeter of the Rose A Unit.

This case was heard on January 11, 2012, jointly with Rule 37 Case No. 0273242, another XTO Rule 37 case involving proposed Well No. 3H on the Rose A Unit. A separate proposal for decision is being issued in Rule 37 Case No. 0273242.

#### **DISCUSSION OF THE EVIDENCE**

#### XTO Energy, Inc.

XTO proposes to drill Well No. 9H on the Rose A Unit. The Rose A Unit has 312.594 acres within its perimeter, 311.918 acres of which are leased. Total unleased acreage in the Unit is 0.656 acres. There are 200 separate tracts of land in the Rose A pooled unit, 198 of which are leased and two of which remain unleased. The unleased tracts are Tract No. 50 owned by Daniel St. Clair, which is a 0.303-acre tract, and Tract No. 124 owned by Gerald Bolonchuk, which is a 0.353-acre tract. The distance from proposed Well No. 9H to Tract No. 50 is about 34 feet. The distance from proposed Well No. 9H to Tract No. 124 is about 95 feet. The Rose A Unit is located in the City of Arlington.

Leasing activity in the area of the Rose A Unit commenced in 2005, with most of the leases being taken in 2007. A majority of the leases on tracts within the Rose A Unit were made on terms which included bonuses in the range of \$1,500 to \$3,500 per net mineral acre, royalties in the range of 22% to 25%, and a three year primary term. Daniel St. Clair and Gerald Bolonchuk were first contacted about leasing in 2007. Since that time, St. Clair and Bolonchuk have been provided multiple opportunities to lease to XTO, but they have not agreed to lease on the terms offered by

The examiners have officially noticed that special field rules for the Newark, East (Barnett Shale) Field provide for 330' lease line spacing. As to horizontal wells, where the horizontal portion of the well is cased and cemented back above the top of the Barnett Shale formation, the distance to any property line, lease line, or subdivision line is calculated based on the distance to the nearest perforation in the well, and not based on the penetration point or terminus.

XTO. XTO is still willing to lease protestants' tracts on terms that include a bonus of 4,300 per net mineral acre and a 25% royalty.

As of the date of the hearing, XTO had drilled only one well, Well No. 1H, on the Rose A Unit. XTO plans, however, to drill at least five additional wells on the 311.918-acre Unit. Appendix 3 to this proposal for decision is a plat that shows the as-drilled location of Well No. 1H and the permitted locations of additional wells not yet drilled, including Well Nos. 2H, 3H, 5H, 7H, 9H, and 10H.<sup>2</sup> All of these wells have been permitted, except for Well No. 10H. Well No. 1H and proposed Well Nos. 2H, 5H, and 7H are at regular locations more than 330 feet from any surrounding mineral property lines. However, according to XTO's landman, the drilling permit obtained for Well No. 2H has expired, and XTO has decided that it would not be economical to drill Well No. 2H because of its short lateral. Well Nos. 3H and 9H are at Rule 37 locations because they are closer than 330 feet to the two unleased tracts that are internal to the Rose A Unit. Well No. 10H is proposed to be drilled at a Rule 37 location because it is closer than 330 feet to the eastern boundary of the Rose A Unit. Although XTO is the operator of the Rose B Unit to the east, there may be unleased tracts within the perimeter of the Rose B Unit that prevent XTO from giving itself a waiver for a Rule 37 exception permit for Well No. 10H. The Appendix 3 plat shows that the completable drainhole lengths of Well No. 1H and the additional wells proposed to be drilled on the Unit are as follows: Well No. 1H - 2,329 feet; Well No. 2H - 1,625 feet; Well No. 3H - 4,040 feet; Well No. 5H - 4,853 feet; Well No. 7H - 1,888 feet; Well No. 9H - 4,134 feet; and Well No. 10H - 2,518 feet.<sup>3</sup> All of these wells are drilled or to be drilled from the same drill site in the northeast corner of the Unit. Due to restrictions in XTO's oil and gas leases and limitations on drill sites that the City will approve, this is the only drill site available to XTO for wells drilled on the Rose A Unit.

As shown by the plat in Appendix 1 to this proposal for decision, the original drilling permit issued for the Rose A Unit, Well No. 9H on December 8, 2011, is encumbered by NPZs around Rose A Unit Tract Nos. 50 and 124, which are the two unleased tracts within the perimeter of the Unit. The NPZs around Tract No. 50 are a combined 838 feet in length, and the NPZs around Tract No. 124 are a combined 792 feet in length. The combined length of all the NPZs is 1,630 feet, more than one-third of the completable length of the Well No. 9H drainhole.

A cross section consisting of logs for two pilot wells to the west and southeast of proposed Well No. 9H demonstrated that thickness of the Barnett Shale reservoir in the area of the Rose A Unit is about 375 feet. The Rose A Unit is surrounded by Barnett Shale wells, and a consulting petroleum engineer retained by XTO testified that all of the acreage in the Unit is expected to be productive in the Barnett Shale.

<sup>&</sup>lt;sup>2</sup> The Appendix 3 plat shows the proposed wells as XTO would like to drill them. NPZs that encumber the existing drilling permits for Well Nos. 3H and 9H are not depicted on the Appendix 3 plat.

<sup>&</sup>lt;sup>3</sup> The completable drainhole lengths shown for Well Nos. 3H and 9H assume that the NPZs that now encumber the existing drilling permits for these wells are removed so that the entire drainhole can be perforated.

XTO's consulting petroleum engineer performed a study of all Barnett Shale wells within five miles of the terminus of the proposed Rose A Unit, Well No. 3H. There are 301 Barnett Shale wells within this study area that had adequate production history and completion information to be included in the study. Estimated ultimate recoveries were calculated for these wells by decline curve and data was also compiled regarding the perforated lateral length of each well. From this information, a plot of estimated ultimate recovery versus drainhole length was generated and a computer generated least squares regression of the data points on the plot developed a line through the data points with a positive slope of 0.5258 MMCF. The intercept is 532.73 MMCF. The implication of this study is that a horizontal well in this area will recover .5258 MMCF of gas for every foot of horizontal drainhole plus 532.73 MMCF.

XTO's consulting petroleum engineer also calculated the amount of current recoverable reserves beneath the Rose A Unit. Volumetrically calculated gas in place beneath the Unit is 58.8 BCF. Assuming a recovery factor of 30%, which XTO believes is conservative, the current recoverable reserves beneath the Unit are estimated to be 17.6 BCF. The estimated ultimate recovery for the Rose A Unit, Well No. 1H developed by decline curve analysis is 2,973 MMCF. The estimated ultimate recoveries for the additional wells that are planned for the Rose A Unit but are not yet drilled are as follows: Well No. 2H - 1,386 MMCF; Well No. 3H - 2,656 MMCF; Well No. 5H - 3,084 MMCF; Well No. 7H - 1,525 MMCF; Well No. 9H - 2,706 MMCF; and Well No. 10H - 1,856 MMCF. The total of these EURs is 16,186 MMCF, or about 16.2 BCF, which is less than the estimated 17.6 BCF of current recoverable reserves beneath the Unit. 5

According to XTO's consulting petroleum engineer, it would be possible for XTO to directionally drill a S-curve vertical well at various regular locations on the Rose A Unit, but this would not be feasible or prudent. Such a well would cost about \$1.6 million to drill, and the well would have an EUR of about 0.7 BCF. Based on an assumed gas price of \$4.25, which XTO believes is optimistic, the economics for such a well are not favorable. The well would pay out its drilling and completion cost but would take eight years to do so, and the rate of return on investment would be 1.7%. XTO's consulting petroleum engineer did not believe that any prudent operator would make such an investment. There are few, if any, vertical wells producing from the Barnett

<sup>&</sup>lt;sup>4</sup> This is an estimate of what an "average" horizontal well in the Barnett Shale will recover. This estimate will not be accurate for all wells, because some wells are better and some poorer. The estimated ultimate recovery for the Rose A Unit, Well No. 1H developed by decline curve is 2.9 BCF. Using the methodology from XTO's plot of EUR versus drainhole length projects an ultimate recovery of only 1.7 BCF for the same well.

The EUR for Well No. 2H is included in this analysis, although XTO's landman testified that this well no longer has a valid permit, and XTO has decided it would not be economical to drill the well because of its short lateral. The EURs for Well Nos. 3H and 9H assume that Rule 37 exceptions are granted for these wells removing the NPZs that encumber their existing permits. XTO's consulting petroleum engineer apparently believed that there is some doubt that XTO will be able to drill Well No. 10H because of the need to obtain a Rule 37 for this well and XTO's potential inability to give itself a waiver. There is no evidence that this is a valid concern, but if the EUR for Well No. 10H is disregarded, the combined EUR for all of the planned wells on the Rose A Unit would be about 14.3 BCF.

Shale within five miles of the Rose A Unit. The industry standard is to develop the Barnett Shale with horizontal wells.

XTO's consulting petroleum engineer also calculated the amount of current recoverable reserves beneath the protestants' tracts. Current recoverable reserves beneath Tract No. 50 owned by Daniel St. Clair are about 17,154 MCF. Current recoverable reserves beneath Tract No. 124 owned by Gerald Bolonchuk are about 19,863 MCF. XTO compared these reserves beneath protestants' tracts with the incremental recovery of the Rose A Unit, Well No. 9H if the NPZs are removed from the well's existing permit. Well No. 9H has NPZs having combined length of 1,630 feet. XTO's plot of EUR versus drainhole length for 301 Barnett Shale wells within five miles of the proposed terminus location for Well No. 3H suggests that Well No. 9H ultimately will recover .5258 MMCF per foot of drainhole. Thus, XTO reasons that removal of the 1,630 feet of NPZs from Well No. 9H will enable the well ultimately to recover 857.05 MMCF more than the same well would recover if the requested Rule 37 exception were denied and the NPZs were retained. XTO asks the Commission to weigh whether the 37,000 MCF of current recoverable gas beneath protestants' tracts should be protected at the cost of not allowing XTO and its lessors to recover 857.05 MMCF of gas from beneath the Rose A Unit.

#### **Protestants**

Gerald Bolonchuk did not appear at the hearing in person but was represented by Daniel St. Clair. Mr. St. Clair appeared representing himself and Mr. Bolonchuk, cross-examined applicant's witnesses, and presented testimony. Mr. St. Clair emphasized that he and Mr. Bolonchuk had not refused to lease to XTO, but had simply declined to lease on the terms that XTO offered. Mr. St. Clair believes that because his tract is within 330 feet of proposed Well No. 9H and XTO needs a lease from him in order to avoid the need to seek a Rule 37 exception permit, he is entitled to better lease terms than other mineral owners in the Unit who are located further away from the proposed well.

Mr. St. Clair complained that a landman representing XTO had "stalked" his family attempting to obtain a lease. He also complained that XTO had not been forthright, since its representatives had expressed uncertainty as to whether there is any gas beneath the St. Clair tract and had diminished the importance to XTO of obtaining a lease from St. Clair. Mr. St. Clair complained further that XTO has not been a good neighbor because of the noise it has created in the neighborhood. He believes that the current XTO offer of a \$4,300 per net mineral acre bonus is "completely unacceptable" given what he will have to put up with. Mr. St. Clair asserts that XTO is using Rule 37 to bully the hold-out landowners into leasing for pennies on the dollar.

#### **EXAMINERS' OPINION**

An owner of oil and gas is entitled to an opportunity to recover the reserves underlying his tract, and any denial of that opportunity amounts to confiscation. *Atlantic Refining Co. v. Railroad* 

Commission, 346 S.W.2d 801 (Tex. 1961); Imperial American Resources Fund, Inc. v. Railroad Commission, 557 S.W.2d 280 (Tex. 1977). When the subject tract is capable of supporting a regular location, the applicant for a Rule 37 exception based on confiscation must prove that the proposed irregular location is necessary because of surface or subsurface conditions and that the proposed location is reasonable. To do this, the applicant must show that it is not feasible to recover its fair share of hydrocarbons from regular locations.

The examiners are of the opinion that approval of the Rule 37 exception requested by XTO is necessary to prevent confiscation and protect correlative rights. XTO and its lessors are entitled to recover their fair share of gas from beneath the Rose A Unit. "Fair share" is measured by the current recoverable reserves beneath the Unit, which in this case is 17.6 BCF. The evidence shows that it is not feasible for XTO to recover its fair share of gas from regular locations on the Unit. XTO has permitted four wells at regular locations on the Unit, Well Nos. 1H, 2H, 5H, and 7H. Well No. 1H has been drilled, and XTO plans to drill Well Nos. 5H and 7H. There is a question as to whether Well No. 2H will be drilled because the permit for the well has expired, and XTO's landman testified that XTO had decided the well would be uneconomical due to its short lateral. In any event, allowing for a reasonable amount of spacing between wells so that the wells will not interfere with each other, Well Nos. 1H, 2H, 5H, and 7H occupy all of the regular locations on the Rose A Unit where horizontal wells with unrestricted laterals of reasonable length might be drilled from the only available surface location. The evidence shows that the combined estimated ultimate recoveries for these four wells at regular locations is slightly less than 9.0 BCF, as compared to the 17.6 BCF which is XTO's "fair share."

Planned Well Nos. 3H and 9H might, of course, be drilled at "regular" locations if the wells were not completed with perforations in the area of the NPZs that encumber the existing drilling permits for the wells. However, this would not allow XTO to recover its "fair share" either. The EUR for Well No. 3H with its 1,556 feet of NPZs is about 1.8 BCF. The EUR for Well No. 9H with its 1,630 feet of NPZs is also about 1.8 BCF. Thus, the present and planned unrestricted wells at "regular" locations, Well Nos. 1H, 2H, 5H, and 7H, and Well Nos. 3H and 9H if restricted by NPZs so as to be "regular," would have a combined EUR of about 12.6 BCF, which is still 5.0 BCF less than XTO's "fair share" of 17.6 BCF. Rule 37 horizontal wells are needed in order to allow XTO an opportunity to recover its fair share of gas from the Rose A Unit.<sup>6</sup>

A remaining question is whether a Rule 37 exception that would have the effect of removing the 1,630 feet of NPZ's from proposed Well No. 9H is necessary in order to allow XTO to recover most of its "fair share." It is necessary. The combined EUR for the one existing well, Well No. 1H,

The examiners recognize that wells might be drilled directionally from the only available surface location and then vertically at various "regular" locations on the unit. This is not feasible, however, because the industry standard is to develop the Barnett Shale by the drilling of horizontal wells, and even if a prudent operator would drill such a well given the poor economics, the well would recover only about 0.7 BCF. Any attempt to recover the current recoverable gas beneath the Rose A Unit by the drilling of vertical wells would involve the drilling of a large number of unnecessary wells.

and *all* of the planned wells at regular and Rule 37 locations necessary to fully develop the Rose A Unit is 16.1 BCF, which is still 1.5 BCF less than XTO's "fair share." This assumes the NPZs are removed from Well Nos. 3H and 9H by approval of Rule 37 exceptions. Failure to approve the requested Rule 37 exception removing the 1,630 feet of NPZs from Well No. 9H would lessen XTO's ability to recover its "fair share" by about 857.05 MMCF or 0.86 BCF.

The examiners have considered the interests of Mr. St. Clair and Mr. Bolonchuk in the minerals beneath their tracts. The interests of these protestants must be weighed against the interests of XTO and the owners of the 198 tracts within the Rose A Unit who agreed to lease and pool and who, presumptively, would like to see the Unit developed as fully and efficiently as possible. Mr. St. Clair is the owner of Tract No. 50 containing 0.303 acres and Mr. Bolonchuk is the owner of Tract No. 124 containing 0.353 acres. These are the only tracts within the perimeter of the Rose A Unit that remain unleased. Estimated recoverable gas beneath Mr. St. Clair's tract is 17,154 MCF, and estimated recoverable gas beneath Mr. Bolonchuk's tract is 19,863 MCF. The examiners understand protestants' concern that approval of the Rule 37 exception requested by XTO may result, under the law of capture, in drainage of the gas beneath their unleased tracts without compensation. However, XTO and its lessors stand to lose the benefit of a much greater amount of gas, 857.05 MMCF, if the requested Rule 37 exception is denied and the NPZs are not removed from Well No. 9H. Most of this gas is beneath acreage leased to XTO, and no other well will recover this gas if proposed Well No. 9H is not allowed to recover it. Mr. St. Clair and Mr. Bolonchuk still have an opportunity to protect their interests by deciding to lease their tracts to XTO. The lease terms offered to these protestants by XTO at the hearing are better than those given to a majority of the owners within the Unit who agreed to lease.

Based on the record in this case, the examiners recommend adoption of the following Findings of Fact and Conclusions of Law.

## FINDINGS OF FACT

- 1. At least ten (10) days notice of this hearing was provided to all affected persons as defined by Statewide Rule 37(a)(2) and 37(a)(3) and the special field rules for the Newark, East (Barnett Shale) Field.
- 2. XTO Energy, Inc. ("XTO") seeks an amended drilling permit pursuant to the provisions of Statewide Rule 37 for the Rose A Unit, Well No. 9H, a proposed horizontal well in the Newark, East (Barnett Shale) Field, Tarrant County, Texas.
- 3. An original drilling permit was issued for Well No. 9H on December 8, 2011. This original drilling permit is subject to no perforation zones ("NPZs") around Tract Nos. 50 and 124, which are unleased tracts within the perimeter of the Rose A Unit. These NPZs have combined length of 1,630 feet. The purpose of the present application is to obtain an amended drilling permit that eliminates all the NPZs that encumber the original drilling permit for Well No. 9H.

- 4. The XTO application is opposed by Daniel St. Clair and Gerald Bolonchuk, the owners of the two unleased tracts within the perimeter of the Rose A Unit. Mr. St. Clair is the owner of Tract No. 50 containing 0.303 net acres. Mr. Bolonchuk is the owner of Tract No. 124 containing 0.353 net acres.
- 5. Special field rules for the Newark, East (Barnett Shale) Field provide for 330' lease line spacing. As to horizontal wells, where the horizontal portion of the well is cased and cemented back above the top of the Barnett Shale formation, the distance to any property line, lease line, or subdivision line is calculated based on the distance to the nearest perforation in the well, and not based on the penetration point or terminus.
- 6. The proposed Rose A Unit, Well No. 9H requires a Rule 37 exception because removal of the NPZs from the well would allow XTO to perforate the well within 34 feet of Tract No. 50 and 95 feet from Tract No. 124.
- 7. Proposed Well No. 9H is in the City of Arlington in Tarrant County. The surface location of the well is 320 feet from the north line and 326 feet from the east line of the Unit and 321 feet from the north line and 1,218 feet from the west line of the Ledbetter, L B Survey, A-964. The terminus location is 334 feet from the west line and 864 feet from the north line of the Unit and 494 feet from the east line and 94 feet from the south line of the Hendeberg, A D Survey, A-725. The penetration point location is 559 feet from the north line and 933 feet from the east line of the Unit.
- 8. XTO performed a study of all Barnett Shale wells within five miles of the terminus of the proposed Rose A Unit, Well No. 3H for the purpose of being able to estimate the ultimate recovery of a horizontal well drilled in the area of the Unit. The implication of this study is that a horizontal well in this area will recover .5258 MMCF of gas for every foot of horizontal drainhole plus 532.73 MMCF.
  - a. There are 301 Barnett Shale wells within this study area that had adequate production history and completion information to be included in the study.
  - b. Estimated ultimate recoveries were calculated for these wells by decline curve and data was also compiled regarding the perforated lateral length of each well.
  - c. A plot of estimated ultimate recovery versus drainhole length was generated and a computer generated least squares regression of the data points on the plot developed a line through the data points with a positive slope of 0.5258 MMCF. The intercept is 532.73 MMCF.
- 9. Volumetrically calculated gas in place beneath the Rose A Unit is 58.8 BCF. Assuming a recovery factor of 30%, which XTO believes is conservative, the current recoverable reserves beneath the Unit are about 17.6 BCF.

### Rule 37 Case No. 0273962 Proposal for Decision

- 10. As of the date of the hearing, XTO had drilled only one well, Well No. 1H, on the Rose A Unit. XTO plans, however, to drill at least five additional wells, and perhaps six, on the 311.918-acre Unit. Appendix 3 to this proposal for decision, which is incorporated into this finding by reference, is a plat that shows the as-drilled location of Well No. 1H and the permitted locations of additional wells not yet drilled, including Well Nos. 2H, 3H, 5H, 7H, and 9H. Well No. 10H is also shown, although this well has not yet been permitted.
  - a. There is a question as to whether Well No. 2H will be drilled. XTO has decided that this well would be uneconomical because of its short lateral.
  - b. Well Nos. 3H and 9H are depicted as XTO would like to drill them, that is, without the NPZs that encumber the existing drilling permits for these wells.
  - c. All of these wells are drilled or to be drilled from the same drill site in the northeast corner of the Unit. Due to restrictions in XTO's oil and gas leases and limitations on drill sites that the City will approve, this is the only drill site available to XTO for wells drilled on the Rose A Unit.
- 11. The completable drainhole lengths of Well No. 1H and the additional wells proposed to be drilled on the Unit are as follows, assuming that existing NPZs are removed from Well Nos. 3H and 9H: Well No. 1H 2,329 feet; Well No. 2H 1,625 feet; Well No. 3H 4,040 feet; Well No. 5H 4,853 feet; Well No. 7H 1,888 feet; Well No. 9H 4,134 feet; and Well No. 10H 2,518 feet.
- 12. It is not feasible for XTO to recover its fair share of gas from regular locations on the Rose A Unit.
  - a. "Fair share" is measured by the current recoverable reserves beneath the Unit, which in this case is 17.6 BCF.
  - b. XTO has permitted four wells at regular locations on the Unit, Well Nos. 1H, 2H, 5H, and 7H. Well No. 1H has been drilled, and XTO plans to drill the remainder of these wells with the possible exception of Well No. 2H.
  - c. Allowing for a reasonable amount of spacing between wells so that the wells will not interfere with each other, Well Nos. 1H, 2H, 5H, and 7H occupy all of the regular locations on the Rose A Unit where horizontal wells with unrestricted laterals of reasonable length might be drilled from the only available surface location.
  - d. The combined estimated ultimate recoveries for these four wells at regular locations is slightly less than 9.0 BCF, as compared to the 17.6 BCF which is XTO's "fair share."

- e. Planned Well Nos. 3H and 9H theoretically could be drilled at "regular" locations if the wells were not completed with perforations in the area of the NPZs that encumber the existing drilling permits for the wells.
- f. The EUR for Well No. 3H with its 1,556 feet of NPZs is about 1.8 BCF. The EUR for Well No. 9H with its 1,630 feet of NPZs is also about 1.8 BCF.
- g. The present and planned unrestricted wells at "regular" locations, Well Nos. 1H, 2H, 5H, and 7H, and Well Nos. 3H and 9H if restricted by NPZs so as to be "regular," would have a combined EUR of about 12.6 BCF, which is still 5.0 BCF less than XTO's "fair share" of 17.6 BCF.
- h. Theoretically, wells might be drilled directionally from the only available surface location and then vertically at various "regular" locations on the unit. This is not feasible, however, because the industry standard is to develop the Barnett Shale by the drilling of horizontal wells, and even if a prudent operator would drill such a well given the poor economics, the well would recover only about 0.7 BCF.
- I. Any attempt to recover the current recoverable gas beneath the Rose A Unit by the drilling of vertical wells would involve the drilling of a large number of unnecessary wells.
- j. Rule 37 horizontal wells are needed in order to allow XTO an opportunity to recover its fair share of gas from the Rose A Unit.
- 13. The approval of a Rule 37 exception allowing the drilling of proposed Well No. 9H without the 1,630 feet of NPZ's that encumber the existing drilling permit for the well is necessary to enable XTO to recover its "fair share" of gas from beneath the Rose A Unit.
  - a. The combined EUR for the one existing well, Well No. 1H, and *all* of the planned wells at regular and Rule 37 locations necessary to fully develop the Rose A Unit is 16.1 BCF, which is still 1.5 BCF less than XTO's "fair share." This assumes the NPZs are removed from Well Nos. 3H and 9H by approval of Rule 37 exceptions.
  - b. Failure to approve the requested Rule 37 exception removing the 1,630 feet of NPZs from Well No. 9H would lessen XTO's ability to recover its "fair share" by about 857.05 MMCF or 0.86 BCF.
- 14. Daniel St. Clair and Gerald Bolonchuk were first contacted about leasing in 2007. Since that time, St. Clair and Bolonchuk have been provided multiple opportunities to lease to XTO, but they have not agreed to lease on the terms offered by XTO.
- 15. XTO is still willing to lease protestants' tracts on terms that include a bonus of \$4,300 per net mineral acre and a 25% royalty. This compares to bonuses in the range of \$1,500 to

- \$3,500 per net mineral acre and royalties in the range of 22% to 25% that were offered a majority of the owners of the 198 tracts in the Rose A Unit who agreed to lease.
- 16. The amount of current recoverable gas beneath protestants' tracts that is being protected by the existing NPZs on proposed Well No. 3H is about 37,000 MCF. This compares to about 0.86 BCF of gas that will be lost to XTO and its royalty owner lessors if the NPZs on Well No. 9H are not removed.
- 17. The proposed location of Well No. 9H is reasonable.
  - a. Depending on whether the Rose A Unit #2H is drilled, Well No. 9H is one of seven horizontal wells drilled or planned to be drilled on the Rose A Unit.
  - b. Drilling of all of the planned wells is necessary to fully and effectively develop the Unit and provide XTO with an opportunity to recover as much of its fair share of gas as is possible.
  - c. Well No. 9H is reasonably spaced between planned Well Nos. 3H and 5H in order to avoid interference between these planned wells and provide XTO with an opportunity to recover as much of its fair share of gas as is possible.
  - d. Well No. 9H is "regular" to the nearest Unit boundary.
  - e. The two unleased tracts remaining in the Rose A Unit are located such that any horizontal well of feasible length drilled from the only available surface location east to west across the central section of the Unit is going to be irregularly spaced to the unleased tracts.
  - f. Drilling of Well No. 9H at the proposed location and completion of the well with perforations along the entire completable drainhole is necessary to provide XTO with an opportunity to recover as much of its fair share of gas as is possible.

# **CONCLUSIONS OF LAW**

- 1. Proper notice of hearing was timely issued by the Railroad Commission to appropriate persons legally entitled to notice.
- 2. All things necessary to the Commission attaining jurisdiction over the subject matter and the parties in this hearing have been performed.
- 3. Approval of a Rule 37 exception for the Rose A Unit, Well No. 9H, Newark, East (Barnett Shale) Field, Tarrant County, Texas, is necessary to prevent confiscation and protect the correlative rights of mineral owners.

# **RECOMMENDATION**

The examiners recommend that the application of XTO Energy, Inc., for a Rule 37 exception for the Rose A Unit, Well No. 9H in the Newark, East (Barnett Shale) Field, Tarrant County, Texas, be granted as necessary to prevent confiscation and protect correlative rights.

Respectfully submitted,

James m. soluty

James M. Doherty Hearings Examiner

Brian Fancher
Technical Examiner